

FIG. 1

1	accagcgcacttcggcagcggcagcacctcggcagcacctcagcagcaacatgccagca	60
1	tggtcgcgtgaagccgctcgccgctcgtggagccgctcgtggagtcgctcgttgtagcgggtcgt	
		M P S K
61	agaagaatggaagaagcggaccccaaccacataaaagggtgggtgttcacgctgaataatc	120
1	tcttcttaccttcttcgcctggggttggtgtattttccaccacaagtgcgacttattag	
	K N G R S G P Q P H K R W V F T L N N P	
121	cttccgaagacgagcgcgaagaaaaatacgggagctcccaatctccctatttgattatttta	180
1	gaaggcttctgctcgcgttcttttatgcctcgaggggttagagggataaactaataaaat	
	S E D E R K K I R E L P I S L F D Y F I	
181	ttgttggcagaggagggtaatgaggaaggacgaacacctcacctccaggggttcgctaatt	240
1	aacaaccgctcctcccattactccttctgcttggtggagtgagggtccccaagcgattaa	
	V G E E G N E E G R T P H L Q G F A N F	
241	ttgtgaagaagcaaacttttaataaagtgaagtgggtatttgggtgccgctgccacatcg	300
1	aacacttcttcgtttgaaaattatttcacttcaccataaaacccacgggcgacggtgtagc	
	V K K Q T F N K V K W Y L G A R C H I E	
301	agaaagccaaaggaaactgatcagcagaataaagaatattgtagtaaagaaggcaacttac	360
1	tctttcggtttctcttgactagtcgtcttatttcttataacatcatttcttcggtgaatg	
2	K A K G T D Q Q N K E Y C S K E G N L L	
		*
361	ttattgaatgtggagctcctcgatctcaaggacaacggagtgacctgtctactgctgtga	420
1	aataacttacacctcgaggagctagagttcctgttgccctcactggacagatgacgacact	
2	I E C G A P R S Q G Q R S D L S T A V S	
3	K N F T S S R S R L S L P T V Q R S S H	
		* P C R L S R D V A T
421	gtaccttggttggagagcgggagtcgtggtgaccgttgcagagcagcacccctgtaacgtttg	480
1	catggaacaacctctcgcctcagaccactggcaacgtctcgtcgtgggacattgcaaac	
2	T L L E S G S L V T V A E Q H P V T F V	
3	T G Q Q L A P T Q H G N C L L V R Y R K	
	L V K N S L P L R T V T A S C C G T V N	
481	tcagaaatttccgcgggctggctgaacttttgaaagtgagcgggaaaatgcagaagcgtg	540
1	agtcttttaaaggcggccgaccgacttgaaaactttcactcgcccttttacgtcttcgcac	
2	R N F R G L A E L L K V S G K M Q K R D	
3	D S I E A P Q S F K Q F H A P F H L L T	
	T L F K R P S A S S K F T L P F I C F R	
541	attggaagaccaatgtacacgtcattgtggggccacctgggtgtggtaaaagcaaattggg	600
4	taaccttctggttacatgtgcagtaacaccccggtggaccacaccatttctggttaccc	
1		M Y T S L W G H L G V V K A N G
2	W K T N V H V I V G P P G C G K S K W A	
3	I P L G I Y V D N H P W R P T T F A F P	
	S Q F V L T C T M	
601	ctgctaattttgcagacccggaaccacataactggaaaccacctagaaacaagtgggtggg	660
4	gacgattaaaacgtctgggccttttggtgtatgaccttgggtggatctttgttcaccaccc	
1	L L I L Q T R K P H T G N H L E T S G G	
2	A N F A D P E T T Y W K P P R N K W W D	
	S S I K C V R F G C V P F W R S V L P P	

FIG. 2A

661	atgggttacatgggtgaagaagtgggtgttattgatgacttttatggctggctgccgtggg	720
	taccaatgggtaccacttcttcaccaacaataactactgaaaataccgaccgacggcaccc	
4	M V T M V K K W L L L M T F M A G C R G	
1	G Y H G E E V V V I D D F Y G W L P W D	
2	I T V M	
721	atgatctactgagactgtgtgatcgatatccattgactgtagagactaaaggtggaactg	780
	tactagatgactctgacacactagctataggttaactgacatctctgatttccaccttgac	
4	M I Y *	
1	D L L R L C D R Y P L T V E T K G G T V	
781	taccttttttggcccgagctattctgattaccagcaatcagaccccggttggaatgggtact	840
	atggaaaaaacggggcgctcataagactaatggcggttagtctggggcaaccttaccatga	
1	P F L A R S I L I T S N Q T P L E W Y S	
841	cctcaactgctgtcccagctgtagaagctctctatcggaggattacttcccttggtatttt	900
	ggagttgacgacagggtcgacatcttcgagagatagcctcctaataaggaaccataaaa	
1	S T A V P A V E A L Y R R I T S L V F W	
901	ggaagaatgctacaaaacaatccacggaggaagggggccagttcgtcacccctttccccc	960
	ccttcttacgatgttttgtaggtgcctccttccccgggtcaagcagtgaggaaagggggg	
1	K N A T K Q S T E E G G Q F V T L S P P	
961	catgccctgaatttccatataaataaattactgagcttttttatcacttcgtaatgggt	1020
	gtacgggacttaaggtatactttatttaatgactcagaaaaaatagtgaaagcattacca	
5		M V
1	C P E F P Y E I N Y *	
1021	ttttattattcatttaggggttcaagtggggggtctttaagattaaattctctgaattgta	1080
	aaaataataagtaaatcccaagttcacccccagaaattctaatttaagagacttaacat	
5	F I I H L G F K W G V F K I K F S E L Y	
6	* P E L P P D K L N F E R F Q	
1081	catacatgggttacacggatattgtagtcctggctgattttactgttttcgaacgcagtg	1140
	gtatgtaccaatgtgcctataacatcaggaccagcataaatgacaaaagcttgctgcacg	
5	I H G Y T D I V V L V V F T V F E R S A	
6	V Y M T V R I N Y D Q D Y K S N E F A T	
1141	cgaggcctacgtggtccacatttccagaggtttgtagcctcagccaaagctgattccttt	1200
	gctccggatgcaccaggtgtaaaggtctccaaacatcgagtcggtttcgactaaggaaa	
5	E A Y V V H I S R G L *	
6	G L G V H D V N G S T Q L R L W L Q N R	
1201	tggtattttggttggaagtaataatagtgaggagcaagaacaggtttgggtgtgaagtaac	1260
	acaataaaccaaccttcattagttatcacctcagttcctgtccaaaccacacttcattg	
6	K N N P Q F Y D I T S D L V P K P T F Y	
1261	gggagtggttaggagaaggggttggggattgtatggcgggaggagtagtttacatatgggt	1320
	ccctcaccatcctcttcccaacccctaacataaccgcccctcctcatcaaatgtatacca	
6	R S H Y S F P Q P I T H R S S Y N V Y P	
1321	cataggttagggctgtggcctttgttacaaagttatcatctaaaataacagcagtgaggc	1380
	gtatccaatcccgacaccggaacaatgtttcaatagtagattttattgtcgtcacctcg	
6	D Y T L A T A K T V F N D D L I V A T S	

FIG. 2B

1381	ccactcccctatcaccctgggtgatgggggagcâaggccagaattcaaccttaacctttc	1440
6	ggtaggggtagtgggacccactacccctcggtccggtcttaagttggaattggaaag	
	G V G R D G Q T I P S C P W F E V K V K	
1441	ttattctgtagtattcaaagggtatagagattttgttggtccccctcccgggggaacaa	1500
6	aataagacatcataagtttcccatatctctaaaacaaccaggggggagggccccctgtt	
	R I R Y Y E F P I S I K N T G G G P P V	
1501	agtcgtcaatttttaaattctcatcatgtccaccgcccaggaggcggttgtagctgtggtac	1560
6	tcagcagttaaaatttagagtagtacaggtagggcggtcctcccgcaacactgacaccatg	
	F D D I K F R M M D V A W S P T T V T T	
1561	gcttgacagtatatccgaagggtgcgggagaggcggtgttgaagatgccatttttccttc	1620
6	cgaactgtcatataggcttccacgccctctccgccacaacttctacggtaaaaaggaag	
	R K V T Y G F T R S L R T N F I G N K R	
1621	tccaacggtagcggtggcgggggtggacgagccagggggcgggcgaggatctggccaa	1680
6	aggttgccatcgccaccgccccacctgctcggtccccgcgcgcctcctagaccggtt	
	R W R Y R H R P H V L W P R R R L I Q G	
1681	gatggctgcgggggcggtgtcttcttctgcggtaacgcctccttggtacgtcatagctg	1740
6	ctaccgacgccccgccacagaagaagacgccattgcgagggaacctatgcagtatcgac	
	L H S R P R H R R R R Y R R R P Y T M	
1741	aaaacgaaagaagtgcgctgtaagtatt	1800
	ttttgctttcttcacgcgacattcataa	

FIG. 2C

860121" T 9660260

```

      10      20      30      40      50      60
MPSKKNRSGPQPHKRWVFTLNNPSEDERKKIRELPISLFDYFIVGEEGNEEGRTPHLQG
.....
MPSKK---SGPQPHKRWVFTLNNPSEEEKNKIRELPISLFDYFVCGEEGLEEGRTPHLQG
      10      20      30      40      50

      70      80      90     100     110     120
FANFVKKQTFNKVKWYLGARCHIEKAKGTDQQNKEYCSKEGNLLIECGAPRSQGQRSDLS
.....
FANFAKKQTFNKVKWYFGARCHIEKAKGTDQQNKEYCSKEGHILIECGAPRNQGKRSCLS
  60      70      80      90     100     110

      130     140     150     160     170     180
TAVSTLLESGILVTVAQHPTFVKNFRGLAELLKVSGKMQRDWKTNVHFIVGPPGCGK
.....
TAVSTLLETGSLVTVAEQFPVTYVRNFRGLAELLKVSGKMQRDWKTAVHVIVGPPGCGK
 120     130     140     150     160     170

      190     200     210     220     230     240
SKWAANFANPETTYWKPPKNKWWGYPHGEKVVIDDFYGWLPWDDLRLCDRYPLTVKTK
....
SQWARNFAEPRDTYWKPSRNKWWGYPHGEKVVIDDFYGWLPWDDLRLCDRYPLTVETK
 180     190     200     210     220     230

      250     260     270     280     290
GGTVPFLARSILITSNQTPLEWYSSTAVPAVEALYRRITSLVFWKNATKQSTE-EGGQFV
.....
GGTVPFLARSILITSNQAPQEWYSSTAVPAVEALYRRITTLQFWKTAGEQSTEVPEGRFE
 240     250     260     270     280     290

300      310
TLSPPCPEFPYEINY
.....
AVDPPCALFPYKINY
300      310
```

FIG. 3A

360T2T" F9660260

```

      10      20      30      40      50      60
MLLLRCCRGAAAAEVRWYSSALLSFSAMTYPRRRYRRRRHRPRSHLGQILRRRPWLVHP
      :      :      :      :      :      :
-----W-----PRRRYRRRRTRPRSHLGNILRRRPYLHP
                        10      20      30

      70      80      90      100     110
--RHRYWRRKNGIFNTRLSTFGYTVKRRTTVTPSWAVDMMRFKIDDFVPPGGGTNKIS
      :      :      :      :      :      :
AFRNRYRWRRKTGIFNSRLSTEFVLTIK-GGYSQPSWNVNLYKFNIGQFLPPSGGTNPLP
      40      50      60      70      80

120      130      140      150      160      170
IPFEYYRIRKVKVEFWPCSPITQDGRGVGSTAVILDDNFVTKATALTYDPYVNYSSRHTI
      :      :      :      :      :      :
LPFQYYRIRKAKYEFYPRDPITSNQRGVGSTVVILDANFVTPSTNLAYDPYINYSSRHTI
90      100      110      120      130      140

180      190      200      210      220      230
PQPFSYHSRYFTPKEPVLSTIDYFQPNKRNQLWLRLQTSGNVDHVGLGTAFENSKYDQD
      :      :      :      :      :      :
RQPFTYHSRYFTPKEPQLDQIDWFHPNNKRNQLWLHLNTHTNVEHTGLGYALQNAATAQN
150      160      170      180      190      200

240      250      260
YNIRVTMYVQFREFNLKDPPLEP
      :      :      :
YVVRTIYVQFREFILKDP-LNK
210      220      230
```

FIG. 3B

PCV 412 9741 B9
 ATTGTACATAAATAGTCAGCCTTACCACATAATTTTGGGCTGTGGCTGCA-TTTTGGAGCCATAGCCGAGGCTGTGCTCTCGACATTTGGTGTGGGTATTTAAATGGAGCCACAGCTGG
 C G T CA GG TATTG G CC T - ATT A TG C A GT ACC G C TCCAGA T G GCCTC A A
 C G T CA GG TATTG G CC T - ATT A TG C A GT ACC G C TCCAGA T G GCCTC A A
 C G T CA GG TATTG G CC T - ATT A TG C A GT ACC G C TC AGA T G GCCTC A A

PCV 412 9741 B9
 TTTCTTTTATTTATTTGGGTGGAACCAATTCATTTGTTGTCACAGCTCAGGTTTGGGGGTGAAGTACCTGGAGTGTAGGTAAAGGCTGCTTATGGTGTGGCGGAGGAGTGTATTATA
 C G T GT A GGA A AA T A G AG T GGGG T A T C
 C G T GT A GGA A AA T A G AG T GGGG T A T C
 C G T GT A GGA A AA T A G AG T GGGG T A T C

PCV 412 9741 B9
 TAGGGTTCATAGGCCAAGTTGGTGGAGGGGTTACAAAAGTTGGCATCCAAAGATAACAACAGTGCACCCACCTCTTTGATTAGAGGTGATGGGTCTCTGGGTAAATTCATATTTA
 TT G GCT CCITT AT T A G G C T C A C CCCTG GAG AA CC G ACC
 TT G GCT CCITT AT T A G G C T C A C CCCTG GAG A CC G ACC
 TT G GCT CCITT AT T GA G G C T C A C CCCTG GAG A CC G ACC

PCV 412 9741 B9
 GCCTTTCTAATACGGTAGTATTGGAAAGTAGGGGTAGGGGTTGGTGGCCGCTGAGGGGGAGGAAGTGGCCGATGTTGAATTTGAGGTAGTTAACATTCACAAGATGGC--TGGGAGT
 A T T T CA G TA AG TTTT C C CCC A CA G C T A T A C C TCAT CC CGC G G GT T C
 A T T T CA G TA AG TTTT C C CCC A CA G C T A T A C C TCAT CC CGC G G GT T C
 A T T T CA G TA AG TTTT C C CCC A CA G C T A T A C C TCAT CC CGC G G GT T C

PCV 412 9741 B9
 ATCCTCCTTTT-ATGGTGAGTACAAATTCGTAGAAAGCGGGGAATTGAAGATACCCGCTTTTCGGGGCATCTGTAAACGGTTTCTGAAAGCGGGG-TGTGCCAAATATGCTTCTCCG
 G GG A GC G CA ATA C G GGTGCGG G TG G AT T C TT T A G G ----- G GA G GCC G G GG GG
 G GG A GC G CA ATA C G GGTGCGG G TG G AT T C TT T A G G ----- G GA G GCC G G GG GG
 G GG AGC G CA ATA C G GGTGCGG G TG G AT T C TT T A G G ----- G GA G GCC G G GG GG

PCV 412 9741 B9
 GAGGATGTTTCCAGATGCTGCGGGGGGCTCTCTCTGCGGTAGCCCTTGGCCACGCTCATCTATATAAAGTGAAGAGTGGCTGCTGTA-GTATT
 C GG TGT AT AGCTG C- --- A
 C GG TGT AT AGCTG C- --- A
 C GG TGT AT AGCTG C- --- A

FIG. 4B

09090260 19660260

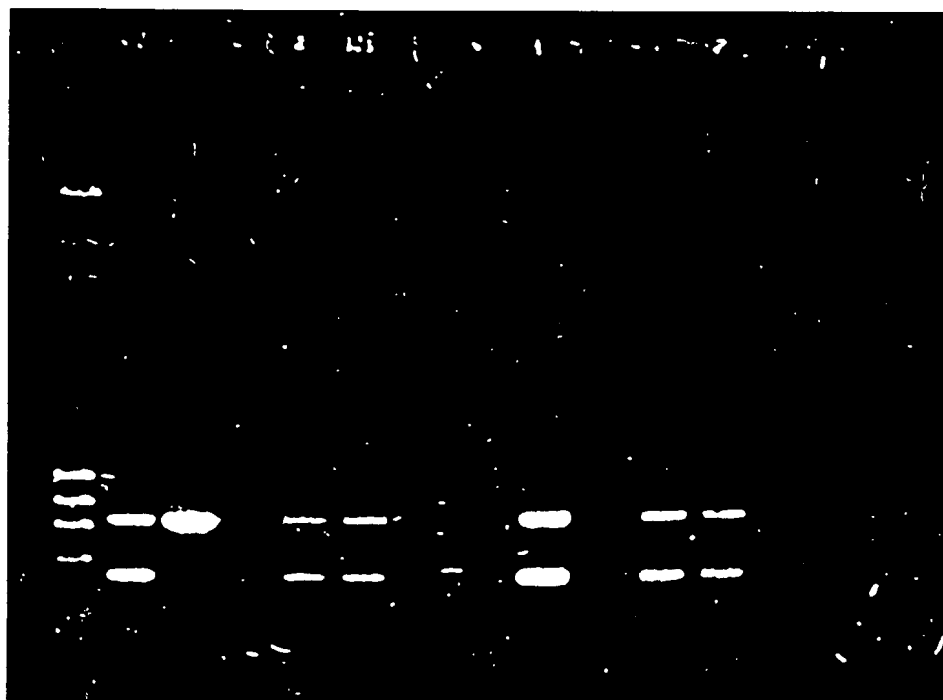


FIG. 5

09209961-121098
860727" T9660260

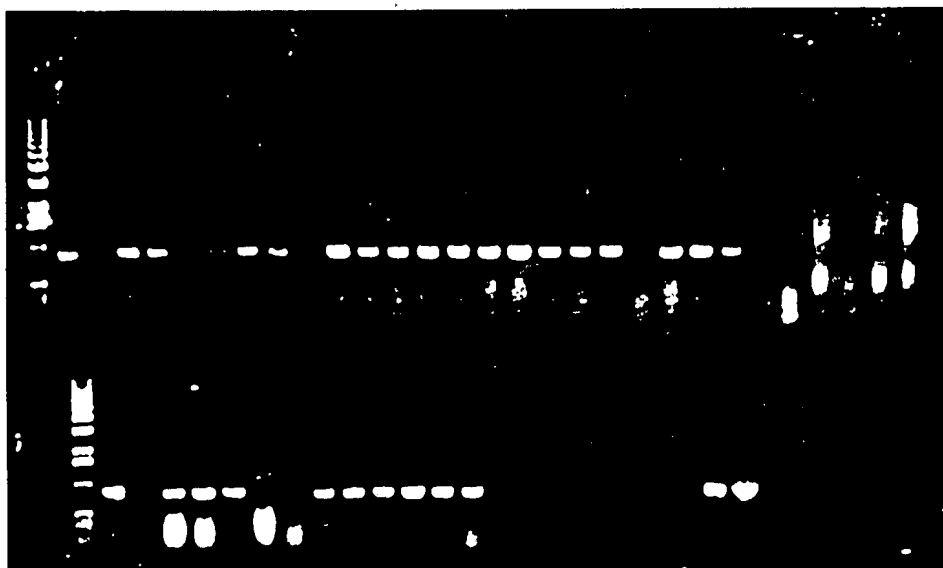


FIG. 6